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August 24, 2016

Joseph Laydon Town Planner Grafton Municipal Center 30 Providence Road Grafton, MA 01519 PLANNING BOARD GRAFTON, MA

T 508-856-0321 F 508-856-0357 gravesengineering.com

Subject:

Grafton US-MA-5025, 104 Creeper Hill Road Cell Tower

Special Permit and Site Plan Review

## Dear Joe:

We received the following documents on July 20, 2016 via e-mail:

• Plans entitled <u>Grafton, US-MA-5025, 104 Creeper Hill Road, Grafton, Massachusetts 01536</u> dated July 6, 2016, prepared by Advantage Engineers. (6 sheet)

We also received the following documents on August 19, 2016 via email:

Plans entitled <u>Plan of Land, #104 Creeper Hill Road in Grafton, Mass (Worcester County)</u>
dated August 18, 2016 and prepared by Metrowest Engineering, Inc. (2 sheets)

Graves Engineering, Inc. (GEI) has been requested to review and comment on the plans' conformance with applicable "Grafton Zoning By-Law" amended through October 19, 2015; Massachusetts Department of Environmental Protection (MassDEP) Stormwater Handbook and standard engineering practices. As part of our review GEI visited the site on August 23, 2016. ANR plans were received, however, as is customary GEI did not review these ANR plans, but could do so if the Planning Board so desires.

## Our comments follow:

## Zoning By-Law

- 1. The Locus Map must be shown at a scale of 1"=1,000', however, the plans provide a Locus Map at a scale of 1"=2,000'. We have no issue with the scale of the locus map as long as it is acceptable to the Planning Board. (§1.3.3.3.d.8)
- 2. The Title Block must contain the Assessor's Map/Lot Number, and the address, phone number, signature and seal of the professional architect or engineer preparing the plan. (§1.3.3.3.d.9)
- 3. Ownership of all abutting land and approximate location of buildings, driveways, and parking areas within 200' of the property lines must be shown on the plans. (§1.3.3.3.d.11)
- 4. Existing and proposed topography must be shown on the plans. The plans do show existing topography approximately 200 feet around the proposed cell tower. However, the plans show a proposed access road from Creeper Hill Road to the facility with no proposed grading. Currently there is a steep drop-off from Creeper Hill Road at the proposed access

road entrance. It is our understanding that the access road may be proposed under a separate project on the property, however, GEI has not yet received plans which include the access road and its existing and proposed topography. (§1.3.3.3.d.12)

- 5. Lot coverage calculations must be shown for percentage of pavement and percentage of open space/landscaped areas. (§1.3.3.3.d.15)
- 6. Any principle part of the facility must be setback a distance of twice the height of the facility or a distance of 300 feet, whichever is greater. The plans show the monopole setback of 226.5 feet from the western property line. Also, although dimensions were not provided on the plans, the monopole will be setback approximately 280 feet and 190 feet from the northern and southern property lines along Flint Pond, respectively. However, these shoreline locations are unlikely to have persons or property present that could be impacted by falling ice or other debris. Nevertheless, we defer to the Planning Board how the applicant should address the setback requirement. (§5.8.6.1)
- 7. Landscaping must be provided around the base of the facility, adjacent to the fence, and consist of a planting strip at least 25' wide, with ground cover and/or grass, and include at least one row of 6' high evergreen trees and a row of deciduous trees at least 10' high and at least 1-1/2" caliper planted no more than 20' on center. Whereas the equipment compound would be located approximately 700 feet from Creeper Hill Road and would essentially be surrounded by existing trees, we defer to the Planning Board how landscaping should be addressed. (§5.8.6.13)

## **Hydrology & MassDEP Stormwater Management**

8. General Note 2 on Sheet 2 of the plans indicates that the project will have only a "de minimus" increase in stormwater runoff. We don't dispute this position, but documentation regarding hydrology and proposed stormwater management was not submitted and we were therefore not able to confirm this position nor review the project's conformance with the MassDEP Stormwater Handbook and the MassDEP Stormwater Standards. Beyond the issue of peak rate attenuation (Standard 2), groundwater recharge (Standard 3) and stormwater quality (Standard 4), the project documents must address construction phase erosion controls (Standard 8) and long-term operation and maintenance (Standard 9, which should at least address site housekeeping as it relates to stormwater).

We trust this letter addresses your review requirements. Feel free to contact this office if you have any questions or comments.

Very truly yours,

Graves Engineering, Inc.

Jeffrey M. Walsh, P.E.

Vice President